REMARKS

Applicants respectfully request reconsideration of the present case in view of the above amendments and the following remarks. Claims 1 and 46 have been amended. Claims 17 and 32 have been canceled. Claims 1-16, 18-31, 33-42 and 46 are currently pending.

No new matter has been inserted. Support for the amendments to claims 1, 42 and 46 can be found at least in claims 17 and 32 and in the specification at least at paragraphs [0046] and [0017].

Interview Summary

As a preliminary matter, Applicants thank the Examiner for conducting a telephonic interview with Applicants' representative on Thursday, July 21st, 2011. The scope and content of independent claim 1 was discussed as well as the distinctions between independent claim 1 and the El-Malki reference. No agreement on the claims was reached.

35 U.S.C. § 103

Claims 1, 2, 24, 27-28, 33-35, 40, 42 and 46 were rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) in view of Rueda (US 2002/0112076). Applicants respectfully traverse this rejection.

The invention of claim 1 is directed to "[a] method of transport protocol optimization of an internet protocol for efficiently moving large amounts of data" and includes steps of "using a source packet interceptor to intercept an IP packet from a source application, the source packet interceptor examines an IP header of the IP packet to determine if it is an IP packet to be intercepted", "using a source packet driver to aggregate the intercepted IP packets from the source application", and "using a source compression engine to compress the aggregated IP packets."

El-Malki discloses "methods and apparatus for providing a hierarchical mobility management function for routing packets to mobile nodes." See abstract. The portion of El-Malki referred to by the Examiner with respect to claim 1 describes that:

> "After the mobile node registers its new care-of address with home agent 145, the home agent is able to serve as a proxy for mobile node 105. Accordingly, IP data packets from correspondent node 155 which are addressed to the mobile node 105 (i.e., the mobile terminal's home address) will be intercepted by the home agent 145. The home agent 145 then encapsulates the IP data packet so that the destination address reflects the mobile terminal's care-of address, i.e., the address of foreign agent 120. The data packet is then sent from the home agent 145 to the foreign agent 120. When the IP data packet arrives at foreign agent 120, the IP data packet is retransformed or de-capsulated by stripping away the external IP header so that the mobile node's home address once again appears as the destination address. The IP data packet can then be delivered to the mobile node, wherein the data contained therein can be processed by the appropriate higher level protocols (e.g., TCP or UDP), as one skilled in the art will readily appreciate." See El-Malki, col. 2, lines 3-21.

First, Applicants point out that El-Malki fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Nowhere does El-Malki teach or suggest such packet aggregation. Similarly, claim 1 also requires "using a destination packet driver to disaggregate the transported aggregated packets". Logically, as El-Malki does not teach or suggest packet aggregation, it similarly fails to teach or suggest packet disaggregation. Similar to claim 1, claim 42 also requires "using a packet driver to encapsulate the IP packet into a packet driver message, and to aggregate packet driver messages". Likewise, claim 46 requires "aggregating packet driver messages". As such, El-Malki fails to teach or suggest these features of claims 1, 42, and 46.

Second, Applicants point out that El-Malki fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. Nowhere does El-Malki teach or suggest compression of aggregated IP packets. Similarly, El-Malki fails

to teach or suggest "using a source compression engine to compress the aggregated packet driver messages" as required by claim 42 and "compressing the aggregated packet driver messages" as required by claim 46.

Third, Applicants point out that "the proposed modification cannot render the prior art unsatisfactory for its intended purpose". See MPEP § 2143.01 (V). In this regard, Applicants point out that packet aggregation and subsequent compression would render El-Malki unsatisfactory for its intended purpose. For example, in the context of mobile nodes (i.e., mobile terminals which frequently change their point-of-attachment to the Internet) which is the focus of El-Malki, aggregating and then compressing packets would hinder various applications of the technology. With regard to intended purpose, El-Malki states that:

> "One application of the present invention is achieving fast handoffs. Fast handoffs address the need to achieve near seamless mobile IP handoffs when a mobile node changes its care-of-address. In accordance with exemplary embodiments of the present invention fast handoffs are achieved by bicasting packets to anticipate the mobile node's movement and to speed up handoffs by sending a copy of the data to the location which the mobile node is moving into." See El-Malki, col. 12, line 9.

However, packet aggregation followed by compression would render processes like bicasting packets less bandwidth efficient and slower thereby fundamentally frustrating the purpose of fast handoffs and rendering the invention of El-Malki unfit for its intended purpose.

Rueda fails to cure the deficiencies of El-Malki. Rueda's invention describes a system of Internet Protocol based computer network services that provide client-side access to server-side services, without the need for installing proprietary software on the client computer. Rueda specifically states that this is different from a conventional Internet Protocol-based network in which connected computers must be configured specifically for that network to access Internet Protocol-based services or to have custom applications running on them to allow this access. See abstract. However, Rueda fails to teach or suggest aggregating intercepted IP packets as well as compressing the aggregated IP packets.

For at least these reasons, the inventions of claim 1, 42, and 46 are not taught or suggested by the combination of El-Malki and Rueda. As claims 2, 24, 27-29, 31, 33-37, and 41 are dependent on claim 1 they are also not taught or suggested by the combination of El-Malki and Rueda.

Claims 29, 31, 32, 36, 37 and 41 were rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) in view of Rueda (US 2002/0112076) and further in view of Ando (US 2002/0044556). Applicants respectfully traverse this rejection.

As described above, the combination of El-Malki in view of Rueda fails to teach or suggest the invention of claim 1. Specifically, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1.

Ando fails to cure the deficiencies of El-Malki in view of Rueda. Specifically, the combination of El-Malki in view of Rueda and Ando fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda and Ando fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As claims 29, 31, 36, 37 and 41 are dependent on claim 1, they are also not taught or suggested by El-Malki in view of Rueda and Ando.

As a further note, the Examiner has cited Fig. 3 of Ando for disclosure of a decompression engine that decompresses the aggregated packets as follows: "(fig 3 discloses a multiplexer)". See page 10 of Office Action. However, Applicants respectfully assert that a multiplexer is not a decompression engine. Applicants respectfully request that this rejection be withdrawn.

Claims 4, 5 and 25 were rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) in view of Rueda (US 2002/0112076) and further in view of Yan (US 2005/000018651). Applicants respectfully traverse this rejection.

As described above, the combination of El-Malki in view of Rueda fails to teach or suggest the invention of claim 1. Specifically, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1.

Yan fails to cure the deficiencies of El-Malki in view of Rueda. Specifically, the combination of El-Malki in view of Rueda and Yan fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda and Yan fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As claims 4, 5, and 25 are dependent on claim 1, they are also not taught or suggested by El-Malki in view of Rueda and Yan. Applicants respectfully request that this rejection be withdrawn.

Claims 7-15, 17-22 and 30 were rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) and Rueda (US 2002/0112076) and further in view of Chapman (US 6,643,292). Applicants respectfully traverse this rejection.

As described above, the combination of El-Malki in view of Rueda fails to teach or suggest the invention of claim 1. Specifically, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1.

Chapman fails to cure the deficiencies of El-Malki in view of Rueda. Specifically, the combination of El-Malki in view of Rueda and Chapman fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda and Chapman fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As claims 7-15, 18-22 and 30 are dependent on claim 1, they are also not taught or suggested by El-Malki in view of Rueda and Chapman.

As a further note, the Examiner has cited Chapman as disclosing a compression engine to compress a packet driver buffer as follows: "(Chapman, col. 5 lns 27-29, discloses Transport Access Point compresses customer packets"). However, Applicants cannot see any reference to compression in the cited portion of Chapman or in other parts of Chapman. To the extent that the Examiner maintains this rejection Applicants respectfully request a more detailed explanation of how Chapman discloses a compression engine. Applicants respectfully request that this rejection be withdrawn.

Claim 23 was rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) and Rueda (US 2002/0112076) and Chapman (US 6,643,292) and further in view of Itoh (US 2002/0194361). Applicants respectfully traverse this rejection.

As described above, the combination of El-Malki in view of Rueda fails to teach or suggest the invention of claim 1. Specifically, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1.

Chapman and Itoh fail to cure the deficiencies of El-Malki in view of Rueda. Specifically, Chapman and Itoh fail to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" and "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As such, the combination of El-Malki, Rueda, Chapman, and Itoh fails to teach or suggest "using a source

packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda, Chapman, and Itoh fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As claim 23 is dependent on claim 1, it is also not taught or suggested by El-Malki in view of Rueda, Chapman, and Itoh. Applicants respectfully request that this rejection be withdrawn.

Claims 38 and 39 were rejected under 35 U.S.C. § 103(a) over El-Malki et al. (US 6,947,401) and Rueda (US 2002/0112076) and further in view of Itoh (US 2002/0194361). Applicants respectfully traverse this rejection.

As described above, the combination of El-Malki in view of Rueda fails to teach or suggest the invention of claim 1. Specifically, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1.

Itoh fails to cure the deficiencies of El-Malki and Rueda. As such, the combination of El-Malki, Rueda, and Itoh fails to teach or suggest "using a source packet driver to aggregate the intercepted IP packets from the source application" as required by claim 1. Further, the combination of El-Malki in view of Rueda, and Itoh fails to teach or suggest "using a source compression engine to compress the aggregated IP packets" as required by claim 1. As claims 38 and 39 are dependent on claim 1, they are also not taught or suggested by El-Malki in view of Rueda, and Itoh. Applicants respectfully request that this rejection be withdrawn.

Summary

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Please charge any additional fees or credit any overpayments to Deposit Account No. 50-3688 which may have been overlooked with regard to this filing.

Respectfully submitted,

July 25, 2011
Date

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